

**Commonwealth of Kentucky  
Division for Air Quality**

***RESPONSE TO COMMENTS***

ON THE CONDITIONAL MAJOR DRAFT PERMIT F-05-011

MarkWest Energy Appalachia, LLC.

P.O. Box 575, U.S. Route 23

South Shore, Kentucky 41175

August 31, 2006

Ralph Gosney, P.E., Reviewer

SOURCE I.D. #: 21-089-00005

SOURCE A.I. #: 1600

ACTIVITY #: APE20040001

**SOURCE DESCRIPTION:**

MarkWest Energy Appalachia, LLC owns and operates an onshore natural gas processing plant located in South Shore, Kentucky referred to as the Siloam facility. This facility receives natural gas liquids from pipeline and from trucks and then physically separates the natural gas liquids into its pure components, such as propane, butane and other products.

The Siloam facility is classified as an onshore natural gas processing plant that uses fractionation to produce a variety of products from natural gas liquids (NGL). The equipment at this facility, which also has the potential to generate emissions of regulated air contaminants, is capable of producing propane, normal butane, isobutene, high-purity butanes and natural gasoline. Operations at the facility include NGL fractionation equipment, above/under ground storage and process tanks, truck loading/unloading operations, railcar loading operations and river barge loading operations. The facility is also equipped with two small industrial boilers (each less than 250 mmBtu/hr).

**PUBLIC AND U.S. EPA REVIEW:**

On July 27, 2006, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Greenup County News-Times* in Greenup County, Kentucky. The public comment period expired 30 days from the date of publication.

*Comment received*

Comments were received from MarkWest Energy Appalachia, LLC on August 18, 2006. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit.

# ATTACHMENT A

## Response to Comments

Comments on MarkWest Energy Appalachia, LLC. an onshore natural gas processing plant Draft Conditional Major Air Quality Permit submitted by Christine Trontell, Environmental Coordinator.

### Permit Application Summary Form

1. Page 2, Isobutane is a product of the Siloam plant not Isobutene.

*Division's response: Comment acknowledged, change made.*

### Permit Statement of Basis

2. Page 1, Isobutane is a product of the Siloam plant not Isobutene.

*Division's response: Comment acknowledged, change made.*

3. Page 3, Tank SV 400 has a 15,115 gallon capacity not 26,950.

*Division's response: Comment acknowledged, change made.*

4. Page 4, Tank SV 300 is listed twice.

*Division's response: Comment acknowledged, change made.*

### Title V Permit

5. Page 14, on page 6 [of the SOB], MarkWest requests clarification for the tanks that would be subject to Subpart Kb. On page 6 of 7.4<sup>th</sup> paragraph it states, "*Kb does not apply to the tanks in Section C of the permit since these tanks are pressurized and operate in excess of 204.9 kPa without emissions to the atmosphere.*" Then on page 14 of 29 in the Applicable Regulations of the permit it states, "*401 KAR 60.005, incorporating by reference 40 CFR 60.kb, Standard of Performance for which Construction, Reconstruction, or modification Commenced after July 23, 1984.*" Does MarkWest need to incorporate Kb? If so, more clarification is requested as to which tanks.

*Division's response: Yes, Kb is applicable to all tanks listed on page 14, Section B of the permit (significant activities). Also, please refer to page 4 of the SOB, third paragraph of Applicable Regulations, which states that, "The rule is applicable to storage tanks SV-502, SV-503, SV-504, SV-505, SV-506 and YD-29, as each vessel was constructed or modified after July 23, 1984."*

*The tanks in Section C of the permit (insignificant activities) are exempt by 40 CFR 60 110b(d)(2), which states that this rule is not applicable to "Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere."*

*There is no change to the permit due to this comment.*

6. Page 9, Section 5, Specific Record Keeping Requirements it states, “*The permittee shall maintain written records of the results of opacity testing in accordance with 40 CFR 60 Appendix A, method 9, and frequency determination records shall be kept pursuant to Method 22.*” It is MarkWest’s understanding that Method 9 is not referenced in 60.18(f)(1) but Method 22 is. MarkWest is requesting clarification as to the method for compliance MarkWest will be burning only natural gas.

*Division’s response: The Division concurs with the comment and has revised the permit. In accordance with 40 CFR 60.18(f)(1), Method 22 is the required method of compliance therefore, reference to Method 9 has been removed from the permit.*

7. Page 18, MarkWest is requesting that the Compliance Demonstration Method for emission points 06, 07 and 08 (Barge, Rail & Truck) loadouts show recordkeeping of product loadout on a 12-month schedule starting in the month the final permit is submitted. MarkWest’s reasoning for this, is it was demonstrated in the application that the maximum loadouts for these points would not exceed the 90 TPY VOC, 9 TPY single HAP or 22.5 total HAP’s. The total VOC’s at maximum loadouts was calculated at 71.58 TPY and HAP’s equal to 3.45 TPY.

*Division’s response: Markwest will need to have records of product loadout to report emissions each year, regardless. As long as maximum loadouts are not exceeded, the facility may use the maximum emissions from units instead of actual emissions. The following language was added to the permit, “The facility may use the maximum potential emissions from an individual unit each month, instead of calculating actual emissions from that unit.” Controlled VOC emissions at maximum reported rates from the facility are approximately 72 tons/yr.*

*Division’s response:*

8. Page 17, under description SV-400 is a 15,115 gallon tank not 26,950 gallons.

*Division’s response: Comment acknowledged, change made.*

9. Page 19, MarkWest is requesting that product loadouts and fuel used to show that the VOC and HAP emissions have not been exceeded. As per MarkWest’s request in number 7 of this letter.

*Division’s response: Please refer to the Division’s response to comment number 7. There is no change to the permit due to this comment.*

10. Page 19, 5. Source Reporting Requirements. MarkWest is requesting that the loadouts for the emission points 06, 07 and 08 be submitted as part of the semi-annual reports to show compliance with VOC and HAP emissions rather than the calculated VOC and HAP’s

*Division’s response: Please refer to the Division’s response to comment number 7. There is no change to the permit due to this comment.*

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.